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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicants: Dominic J. GASBARRO et al.

Serial No.: 09/731,746

Filed: December 8, 2000

For: HOST-FABRIC ADAPTER HAVING BANDWIDTH-
OPTIMIZING, AREA-MINIMAL, VERTICAL SLICED
MEMORY ARCHITECTURE AND METHOD OF CONNECTING A
HOST SYSTEM TO A CHANNEL-BASED SWITCHED FABRIC
IN A DATA NETWORK

Art Unit: Unknown

Examiner: Not assigned

05/29/2001 T00111 00000020 09731746

01 FC:103

54.00 OP PRELIMINARY AMENDMENTAssistant Commissioner of Patents
Washington, DC 20231

January 17, 2001

Adjustment date: 05/29/2001 T00111

01/18/2001 NM001 : 00000069 09731746

-02 FC:103 -72.00 OP-

Prior to examination, please amend the above-identified application as follows:

IN THE CLAIMS:

Please add new claims 21-24 as follows:

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-21. A method of storing data consisting of multiple widths and multiple occurrences of data widths in a memory, comprising:

3 grouping the data widths of the same size and designating
4 as registers;
5 determining the number of registers;
6 selecting a number of vertically arranged memory slices of
7 registers of different sizes based on register width and system

8 architecture requirements such that each memory slice has a
9 number of registers provided by said system architecture and is
10 arranged to supply respective bits of data, via a system bus of
11 said register width requirement;

12 determining the depth of each of said memory slices based
13 on the respective number of registers provided by said system
14 architecture; and

15 establishing a default location that is initialized to zero
16 ("0") in all subsequent memory slices which serves as a padding
17 value when a memory location of a respective memory slice
18 exceeding a register width of said memory slice is accessed, via
19 said system bus.

20 **22.** The method as claimed in claim 21, wherein said memory
21 is arranged to store context information needed for one or more
22 Micro-Engines (MEs) in a host-fabric adapter to process host data
23 transfer requests for data transfers.

24 **23.** The method as claimed in claim **22**, wherein, when a
25 register width requirement is 32 bits, and a system architecture
26 requires 15 registers of 8 bits, 8 registers of 12 bits, and 17
27 registers of 32 bits for a total of 40 registers, said memory
28 having a bandwidth optimized, vertically sliced memory
29 architecture is partitioned into three memory slices, including

14 Memory C and Memory Z each contains an additional default, last
15 memory location initialized to zero which serves as a padding
16 value to said system bus of 32 bits, when the respective default,
17 last memory location of a respective memory slice is accessed by
18 said Micro-Engine.--

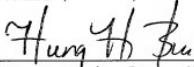
REMARKS

Claims 1-24 are pending in the application. New claims 21-24 are added to alternatively define the process of designing the context memory of the host channel adapter.

To the extent necessary, applicants petition for an extension of time under 37 C.F.R. §1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 of Antonelli, Terry, Stout & Kraus, LLP (referencing Attorney Docket No. 219.38760X00), and please credit any overpayment of fees to said deposit account.

Respectfully submitted,

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